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| 10/619,829   | 07/15/2003  | Jason A. Trachewsky  | BP2481.3            | 7190             |
| 51472 7590 12/10/2008<br>GARLICK HARRISON & MARKISON<br>P.O. BOX 160727<br>AUSTIN, TX 78716-0727 |             |                      |                     |                  |
| EXAMINER   |             |                      |                     |                  |
| CAL WAYNE HUU  |             |                      |                     |                  |
| ART UNIT   |             | PAPER NUMBER         |                     |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/619,829

**Applicant(s)**

TRACHEWSKY, JASON A.

**Examiner**

WAYNE CAI

**Art Unit**

2617

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 15-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 15-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 22, 2008 has been entered.

### ***Response to Arguments***

2. Applicant's arguments filed August 20, 2008 have been fully considered but they are not persuasive.

It appears to the Examiner that the Applicant amends independent claims 15 and 22 to overcome the prior art of record, Monin et al. (hereinafter "Monin", US 2002/0197984). However, the Examiner carefully reconsiders the newly proposed claim language and the teachings of Monin. It seems to the Examiner that Monin still reads on claimed invention. Therefore, Monin is introduced again in detailed rejections set forth below. Please refer to the rejections for further details.

Also, Monin still reads on claim language because of the following reasons:

It is important to note that figure 5, switch 60 or figure 6, switches 74 & 84 of Monin are considered as the single baseband processor of claimed invention. The

switches of Monin is capable of switching the modulated signals includes parallel switching of baseband signals generated at the central control unit. In other words, the switches of Monin transmits/receives data from/to baseband module 1 and radio module 1 or any other baseband modules and radio modules. Hence, this teaching reads on the currently amended claim language.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 22, first line of page 4, recites "first and second radio interfaces operably coupled to the first and second radio interfaces a single baseband processor..." It is unclear to the Examiner why the first and second radio interfaces couple to themselves. Then, how the single baseband processor is connected to the first and second radio interfaces.

For the purpose of examination, the Examiner interprets the claimed limitation as - - first and second radio interfaces operably coupled to the single baseband processor..."

The Applicant is suggested to either explain or amend claim language in response to this Office Action.

5. Claims 22 recites the limitation "at least one baseband processor" in line 1.

There is insufficient antecedent basis for this limitation in the claim. It should be corrected as - - at least one single baseband processor - -

Claims 22 recites the limitation "a single baseband processor" in line 2 of page 4.

There is insufficient antecedent basis for this limitation in the claim. It should be corrected as - - the baseband processor - -

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 15, 16, 18-23, 25, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Monin et al. (hereinafter "Monin", US 2002/0197984).

**Regarding claim 15**, Monin discloses a Wireless Local Area Network (WLAN) device (fig. 5 and fig. 6, control unit 28), comprising:

a first baseband processor interface for receiving, processing and generating digital data (fig. 5 and fig. 6, baseband module 1 is connected to radio module 1);

a first radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for

producing corresponding digital data to the first baseband processor interface (fig. 5 and fig. 6, radio module 1);

a second baseband processor interface for receiving, processing and generating digital data (fig. 5 and fig. 6, baseband module 2 is connected to radio module 2); and

a second radio for receiving the digital data and for transmitting RF signals in a second frequency band and for receiving RF signals in the second frequency band and for producing corresponding digital data to the second baseband processor interface (fig. 5 and fig. 6, radio module 2).

a single baseband processor that transmits outgoing data and receives ingoing data through the first and second baseband processor interfaces (fig. 5, switch 60 and fig. 6, switches 74 & 84. Also see, paragraph 0040).

**Regarding claims 16 and 23**, Monin discloses all limitations recited within claims as described above. Monin also discloses logic for determining a quality indicator, wherein the quality indicator for a selected channel considers a channel power and interference power for the selected channel (paragraphs 0066, 0068).

**Regarding claims 18 and 25**, Monin discloses all limitations recited within claims as described above. Monin also discloses logic for selecting a communication protocol for operation from a plurality of available communication protocols (paragraph 0071).

**Regarding claims 19 and 26**, Monin discloses all limitations recited within claims as described above. Monin also discloses logic for selecting at least two

frequency bands and communicating over at least one channel in each of the two frequency bands (paragraph 0071, fig. 3).

**Regarding claim 20**, Monin discloses all limitations recited within claims as described above. It is also inherent to include first and second radio interfaces and first and second baseband processors wherein the first baseband processor communicates with the first baseband processor interface by way of the first radio interface and the second baseband processor communicates with the second baseband processor interface by way of the second radio interface.

**Regarding claim 21**, Monin discloses all limitations recited within claims as described above. Monin also discloses including first and second radio interfaces wherein the first baseband processor communicates with the first baseband processor interface by way of the first radio interface and with the second baseband processor interface by way of the second radio interface (see fig. 2).

**Regarding claim 22**, Monin discloses a Wireless Local Area Network (WLAN) device, comprising:

at least one baseband processor for receiving, processing and generating digital data (fig. 5, switch 60 and fig. 6, switches 74 & 84. Also, paragraph 0040);

a first radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the at least baseband processor interface (fig. 5 and fig. 6, radio module 1);

a second radio for receiving the digital data and for transmitting RF signals in a first frequency band and for receiving RF signals in the first frequency band and for producing corresponding digital data to the at least baseband processor interface (fig. 5 and fig. 6, radio module 2);

first and second baseband processor interfaces operably coupled to first and second radios (fig. 5, and fig. 6 illustrates the first baseband processor 1 and baseband processor 2 couple to the first and second radios, respectively. Hence, it is inherent to include first and second baseband processor interfaces);

first and second radio interfaces operably coupled to a single baseband processor, wherein the first and second radio interfaces are operably coupled to communicate with the first and second baseband processor interfaces (fig. 5, switch 60 or fig. 6, switches 74 & 84 is considered as a single baseband processor. Since the single baseband processor of claimed invention or switches of Monin is capable of transmitting/receive data from the baseband and radios; hence, it is inherent to include these interface to make it compatible and communicate with each other.);

wherein the at least single baseband processor generates digital data for transmission from one of the first radio, the second radio or both wherein the single baseband processor produces the digital data through one of the first radio interface, the second radio interface or both for transmission (Note: similar explanation above is applied herewith. That is, the switches of Monin receives and processes data received from any baseband module and radio module); and



wherein the single baseband processor, the first and second radios, the first and second baseband processor interfaces, first and second radio interface are all a part of a single WLAN device (fig. 5 and fig. 6, and its descriptions).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monin et al. (hereinafter "Monin", US 2002/0197984) in view of Brandstetter (US 5,005,946).

**Regarding claims 17 and 24**, Monin discloses all limitations recited within claims as described above, but does not expressly disclose wherein the interference power includes in-channel interference and adjacent channel interference.

In a similar endeavor, Brandstetter discloses a method for multi-channel filtering system. Brandstetter also discloses wherein the interference power includes in-channel interference and adjacent channel interference (col. 8, line 67 – col. 9, line 12).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine these references together.

The motivation/suggestion for doing so would have been to optimize the operation.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to WAYNE CAI whose telephone number is (571)272-7798. The examiner can normally be reached on Monday-Thursday from 8:00 a.m. to 6:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Eisen can be reached on (571) 272-7687. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Wayne Cai/  
Examiner, Art Unit 2617

/Alexander Eisen/  
Supervisory Patent Examiner, Art Unit 2617